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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,551	06/15/2005	Caspar M. T. Elbers	28211/40644	3897

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EXAMINER

CHAN, SING P

ART UNIT PAPER NUMBER

1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/517,551

Applicant(s)

ELBERS, CASPAR M. T.

Examiner

Sing P. Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 1, 3-5, 10, 11, 15, 16, 18, 20, and 22 are objected to because of the following informalities: In claim 1, line 2, "Including" should be "including," line 13, "Is" should be "is," in claim 3, line 3 "in-fine" should be "inline," in claim 4, "Is" should be "is," in claim 5, "In" should be "in," in claim 10, line 2, "Is" should be "is," in claim 11, "Is" should be "is," in claim 15, line 1, "In" should be "in," in claim 16, line 2, "In" should be "in," in claim 18, line 2, "Is" should be "is," in claim 20, line 1, "In" should be "in," in claim 22, line 14, "Is" should be "is." Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12, 14, 16, 17-19, 21-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al (JP 02-72385) in view of Sinclair et al (U.S. 5,968,636).

Regarding claims 1-6, 8-10, 14, 16-19, and 21, Uchida et al discloses a method of forming an embossed hologram pattern. The method includes printing a hologram formation resin of a mixture of resin solution made of a nitrocellulose resin and a urethane resin, which is solvent-based (See English Translation of JP 02-72385, Page 3, lines 20-21), using a photogravure printing machine onto a polyester film, printing an

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opaque ink on the part of the film without the hologram resin using a photogravure printing machine, embossing the hologram resin using an embossing roller with hologram image, depositing an aluminum layer over the entire surface of the film, the hologram resin (See English Translation of JP 02-72385, Page 3, 17-32 and Figure 1-3), and the ink layer with at least the hologram resin layer being embossed (See English Translation of JP 02-72385). Uchida is silent as to the process is inline and continuously take place. However, forming hologram pattern inline and continuously is well known and conventional as shown for example by Sinclair et al. Sinclair et al discloses a method of forming a patterned laminate. The method includes providing printer and stations to produce the laminate in an inline process or stations, which form the require desire length of the laminate or in separate operations, i.e. batch wise processes, which are all functional equivalents. (Col 2, lines 59-65)

It would have been obvious to one of ordinary skill in the art at the time the invention was made provide the stations or process steps in an inline process as disclosed by Sinclair et al in the method of Uchida et al to form an aesthetically pleasing laminate with a continuous process or in separate operation (See Sinclair et al, Col 1, lines 35-42 and Col 2, lines 59-67), i.e. batch wise, which is all functional equivalents.

Regarding claim 7, Uchida et al discloses the ink or color layers are applied after the hologram layer (See English Translation of JP 02-72385), but is silent as to the applying the ink prior to applying hologram layer. However, applying the ink layer prior to applying the hologram layer is well known and conventional as shown for example by

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Sinclair et al. Sinclair et al discloses the ink layer is applied either after the application of the hologram layer or prior to hologram layer. (Col 2, lines 24-58)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to either print the ink layer after printing the hologram layer or prior to printing the hologram layer as disclosed by Sinclair et al in the method of Uchida et al to provide a means or any process of applying the ink layer to form a laminate, which is resistant to deleterious forces to mar the aesthetic quality. (See Sinclair et al, Col 1, lines 28-42)

Regarding claim 11, Uchida et al discloses using an embossing roller, which would repeat the embossed pattern, forms the hologram. (See English Translation of JP 02-72385)

Regarding claim 12, Uchida et al is silent as to reverse printing the ink layer or image and laminating a backing web of flexible sheet material. However, reverse printing the ink layer or image and laminating a backing web of flexible sheet material to the hologram composite film is well known and conventional as shown for example by Sinclair et al. Sinclair et al discloses the ink layer is reverse printing the ink layer or image on the film, which is transparent (Col 2, lines 40-45) and laminating a backing web of flexible sheet material to the composite film, which sandwich the hologram layer, the ink layer, and the metallized layer. (Col 2, lines 40-58)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse printing the ink layer or image and laminating a backing web of flexible sheet material to the composite film as disclosed by Sinclair et al in the

method of Uchida et al to provide a means to form a laminate, which is resistant to deleterious forces to mar the aesthetic quality. (See Sinclair et al, Col 1, lines 28-42)

Regarding claims 22-26, Uchida et al discloses an apparatus of forming an embossed hologram pattern. The apparatus includes printing a hologram formation resin using a photogravure printing machine onto a polyester film, printing an opaque ink on the part of the film without the hologram resin using a photogravure printing machine, embossing the hologram resin using an embossing roller with hologram image, depositing an aluminum layer over the entire surface of the film, the hologram resin (See English Translation of JP 02-72385, Page 3, 17-32 and Figure 1-3), and the ink layer with at least the hologram resin layer being embossed (See English Translation of JP 02-72385). Uchida is silent as to the apparatus or stations are inline and continuously take place. However, providing apparatus or stations for hologram pattern inline and continuously is well known and conventional as shown for example by Sinclair et al. Sinclair et al discloses an apparatus for forming a patterned laminate. The apparatus includes providing printer and stations to produce the laminate in an inline process, which form the require desire length of the laminate or in separate operations, i.e. batch wise processes, which are all functional equivalents. (Col 2, lines 59-65)

It would have been obvious to one of ordinary skill in the art at the time the invention was made provide the stations or process steps in an inline process as disclosed by Sinclair et al in the method of Uchida et al to an apparatus to form an aesthetically pleasing laminate with a continuous process or in separate operation (See

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Sinclair et al, Col 1, lines 35-42 and Col 2, lines 59-67), i.e. batch wise, which is all functional equivalents.

Regarding claim 28, Uchida et al is silent as to provide a laminating station for laminating a backing web of flexible sheet material. However, providing a laminating station for laminating a backing web of flexible sheet material to the hologram composite film is well known and conventional as shown for example by Sinclair et al. Sinclair et al discloses the ink layer is reverse printing the ink layer or image on the film, which is transparent (Col 2, lines 40-45) and laminating a backing web of flexible sheet material to the composite film, which sandwich the hologram layer, the ink layer, and the metallized layer (Col 2, lines 40-58), which would require a laminating station.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a laminating station for laminating a backing web of flexible sheet material to the composite film as disclosed by Sinclair et al in the method of Uchida et al to provide a means to form a laminate, which is resistant to deleterious forces to mar the aesthetic quality. (See Sinclair et al, Col 1, lines 28-42)

4. Claims 13, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al (JP 02-72385) in view of Sinclair et al (U.S. 5,968,636) as applied to claims 1 and 22 above, and further in view of Pinchen et al (U.S. 6,196,383).

Regarding claim 13, Uchida et al as modified above is silent as to slitting the composite film with the hologram embossment and winding the composite film into a roll. However, slitting the composite film with the hologram embossment and winding the composite film into a roll is well known and conventional as shown for example by

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Pinchen et al. Pinchen et al discloses a method of forming a tear tape with holographic image. The method includes forming the hologram using embossing techniques to produce a plurality of longitudinally extending holographic images (Col 4, lines 20-25) and then slitting the tape longitudinally in registry with the holographic images and winding onto a reel (Col 5, lines 20-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a plurality of holograms longitudinally extending along a tape and then slitting the tape longitudinally in registry with the holographic images and winding onto a reel as disclosed by Pinchen et al in the method of Uchida et al as modified by Sinclair et al to provide a simple technique to allow for holograms to be applied to goods and other substrates. (See Pinchen et al, Col 1, lines 51-53)

Regarding claims 29 and 30, Uchida et al as modified above is silent as to providing a slitting station to slit the composite film with the hologram embossment and winding the composite film into a roll. However, slitting the composite film with the hologram embossment and winding the composite film into a roll is well known and conventional as shown for example by Pinchen et al. Pinchen et al discloses a method of forming a tear tape with holographic image. The method includes forming the hologram using embossing techniques to produce a plurality of longitudinally extending holographic images (Col 4, lines 20-25) and then slitting the tape longitudinally in registry with the holographic images and winding onto a reel (Col 5, lines 20-28), which would required to provide a slitting station and a winding station to slit and wind the tape.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a plurality of holograms longitudinally extending along a tape and then providing slitting stations to slit the tape longitudinally in registry with the holographic images and a winding station to wind the tape onto a reel as disclosed by Pinchen et al in the apparatus of Uchida et al as modified by Sinclair et al to provide a simple technique to allow for holograms to be applied to goods and other substrates. (See Pinchen et al, Col 1, lines 51-53)

5. Claims 15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al (JP 02-72385) in view of Sinclair et al (U.S. 5,968,636) as applied to claims 14 and 22 above, and further in view of Murphy (U.S. 5,055,343).

Regarding claim 15, Uchida et al as modified above is silent as to the metal coating is deposited by vacuum deposition. However, depositing metal coating onto transparent film using vacuum deposition is well known and conventional as show for example by Murphy. Murphy discloses depositing aluminum using vacuum deposition onto an acrylic film. (Col 5, lines 64-66)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to deposit aluminum using vacuum deposition onto a acrylic film as disclosed by Murphy in the method of Uchida et al as modified by Sinclair et al to provide an improved decorative film with a long life even when used in outdoor application. (See Murphy, Col 2, lines 9-13)

Regarding claim 27, Uchida et al as modified above is silent as to the metal coating is deposited by vacuum deposition station. However, depositing metal coating

onto transparent film using vacuum deposition is well known and conventional as show for example by Murphy. Murphy discloses depositing aluminum using vacuum deposition onto an acrylic film (Col 5, lines 64-66), which would requires a vacuum deposition station.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a vacuum deposition station to deposit aluminum using vacuum deposition onto a acrylic film as disclosed by Murphy in the method of Uchida et al as modified by Sinclair et al to provide an improved decorative film with a long life even when used in outdoor application. (See Murphy, Col 2, lines 9-13)

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al (JP 02-72385) in view of Sinclair et al (U.S. 5,968,636) as applied to claim 19 above, and further in view of Gili Picoy (U.S. 5,318,807).

Uchida et al as modified above is silent as to the embossing cylinder forms part of the printing press. However, providing the embossing cylinder as part of the printing press is well known and conventional as shown for example by Gili Picoy. Gili Picoy discloses forming a printed sheet with optical effect. The method includes applying the thermoplastic resin to the paper at the same the composite is delivered to the calendar (18) or embossing roll (Col 4, lines 48-54), which requires the embossing roll as part of the printing press.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the embossing roll as part of the printing or coating press

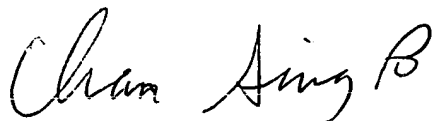
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as disclosed by Gili Picoy in the method of Uchida et al as modified by Sinclair et al to reduce process time. (Col 4, lines 53-54)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P. Chan whose telephone number is 571-272-1225. The examiner can normally be reached on Monday-Thursday 7:30AM-11:00AM and 12:00PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A. Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SPC



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